WE CLAIM:

1. A synthetic oxygen carrier for *in vivo* use comprising a fluorocarbon emulsion having a continuous and discontinuous phase, wherein the emulsion is combined with a bioactive agent selected from the group consisting of cardiovascular agents or neuroprotectand for the tratment of hypoxic or ischemic conditions wherein the cardiovascular agent is located in the discontuous phase of the fluorocarbon emulsion

2. The synthetic oxygen carrier of claim 1 wherein the oxygen carrier is administered by by intravenous injection or infusion.

3. The synthetic oxygen carrier of Claim 1, wherein the fluorocarbon emulsion comprises a fluorocarbon phase and an aqueous phase.

4. The synthetic oxygen carrier of Claim 1, wherein the fluorocarbon emulsion further comprises an emulsifying agent, osmotic agent, buffer, electrolyte or combinations thereof.

5. The synthetic oxygen carrier of Claim 1, wherein the fluorocarbon emulsion comprises a straight chain perfluorocarbon, branched chain perfluorocarbon, cyclic perfluorocarbon or combinations thereof.

6. The synthetic oxygen carrier of Claim 1, wherein the fluorocarbon emulsion comprises a fluorocarbon selected from the group consisting of bis(F-alkyl) ethanes, cyclic fluorocarbons, perfluorinated amines, brominated perfluorocarbons, fluorocarbons having nonfluorine substituents, perfluoroalkylated ethers, perfluoroalkylated polyethers and mixtures thereof.

7. The synthetic oxygen carrier of Claim 1, wherein the neuroprotective compound is selected from the group consisting of a neuropeptide, a nerve growth factor or 2-aminobenzothiazole derivative.

8. The synthetic oxygen carrier of Claim 1, wherein the fluorocarbon emulsion is administered in a patient within one hour of therapy for symptoms associated with ischemia.

9. The synthetic oxygen carrier of Claim 1, wherein the fluorocarbon emulsion is administered to a patient within 24 hours of displaying symptoms associated with ischemia.

10. The synethitc oxygen carrier of Claim 1, wherein the fluorocarbon meulsion is administered to a patient prior to a surgical procedure to remove emboli associated with ischemia.

11. The synthetic oxygen carrier of Claim 1, wherein the fluorocarbon emulsion is administered to a patient during or within 24 hours after a surgical procedure to remove emboli associated with ischemia.

12. The synthetic oxygen carrier of Claim 1, wherein the fluorocarbon emulsion is administered in a volume of intravenous fluid, wherein the synthetic oxygen carrier is at least about equal to 0.1% of the individual's normal blood volume.

13. The composition of Claim 20, wherein the synthetic oxygen carrier is a fluorocarbon-in-water emulsion comprising a discontinuous fluorocarbon phase and a continuous aqueous phase, wherein the fluorocarbon phase comprises submicron sized particles.

10. The synethitc oxygen carrier of Claim 1, wherein the fluorocarbon meulsion is administered to a patient prior to a surgical procedure to remove emboli associated with ischemia.

11. The synthetic oxygen carrier of Claim 1, wherein the fluorocarbon emulsion is administered to a patient during or within 24 hours after a surgical procedure to remove emboli associated with ischemia.

32. The synthetic oxygen carrier of Claim 1, wherein the fluorocarbon emulsion is administered in a volume of intravenous fluid, wherein the synthetic oxygen carrier is at least about equal to 0.1% of the individual's normal blood volume.

13. The composition of Claim 20, wherein the synthetic oxygen carrier is a fluorocarbon-in-water emulsion comprising a discontinuous fluorocarbon phase and a continuous aqueous phase, wherein the fluorocarbon phase comprises submicron sized particles.